

ABSTRACT OF THE DISCLOSURE

5 A remote unit for a personal wireless area network includes a receiver, an AC power supply, a battery-backup power supply and a controller. The battery-backup becomes operative when the AC power supply fails and supplied power to the receiver. The controller detects when the AC power supply fails and controls the receiver and the battery-backup power supply by invoking a sleep mode of operation. The sleep mode of operation is periodically interrupted by the controller controlling the receiver and the battery-backup power supply to enter a standby mode of operation in which the receiver scans for a CONNECT message from a base station indicating an incoming call. The controller coordinates the sleep mode and the standby mode of operations based on a frame count that is generated from an identification number of the remote unit. A highly bandwidth-efficient communications method is employed in the base station to enable it to coordinate communication with the remote unit when it changes from the sleep mode to the standby mode.